

PUBLICATION NUMBER : 62299824  
PUBLICATION DATE : 26-12-87

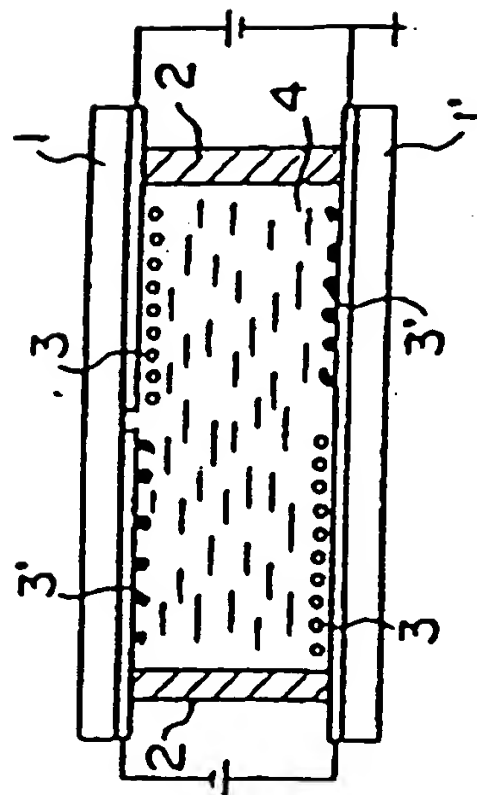
APPLICATION DATE : 19-06-86  
APPLICATION NUMBER : 61143898

APPLICANT : RICOH CO LTD;

INVENTOR : MURAYAMA HISAO;

INT.CL. : G02F 1/19 G09F 9/37

TITLE : ELECTROPHORESIS DISPLAY  
ELEMENT



ABSTRACT : PURPOSE: To improve the sharpness and contrast of display greatly without a decrease in response speed nor a rise in driving voltage and to improve weather resistance by using a noncolored dispersion medium where special fluorescent particles are dispersed instead of a colored dispersion medium where dye is solved.

CONSTITUTION: An electrophoresis display element is formed by charging liquid formed by dispersing at least one kind of fluorescent particles of dispersible resin dyed with fluorescent dye having a color tone in the noncolored dispersion medium with high insulation and low viscosity and at least one kind of pigment particles having a color tone different to above-mentioned one in a cell formed of two opposite electrodes and a spacer arranged on the peripheral edge parts of both electrodes so that at least one of the electrodes is transparent. This electrophoresis display element is supplied with an external electric field from a driving power source 5 (output voltage: normally  $\leq 200V$ ), and then the fluorescent particles (or pigment particle) 3 and pigment particles (or fluorescent particle) 3' cause electrophoresis to stick on the electrodes 1 and 1', thereby displaying the color tones of the particles 3 and 3'.

COPYRIGHT: (C) JPO